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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,373	10/29/2001	Hiroshi Sasaki	01697/LH	1645
1933	7590	04/07/2004	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 767 THIRD AVENUE 25TH FLOOR NEW YORK, NY 10017-2023			FINEMAN, LEE A	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/006,373	Applicant(s) SASAKI ET AL.	
	Examiner Lee Fineman	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 November 2003 has been entered in which claims 10, 12, 17-19, 21 and 25-27 were amended. Claims 10-27 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12-18 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birk et al., U.S. Patent No. 6,611,643 B2, in view of Schoeppe et al., U.S. Patent No. 6,167,173.

Birk et al. disclose a laser microscope (fig. 7), which irradiates a sample (103) with a laser light (25, also see figs. 3 and 4) including lines of different emission wavelengths (column 5, lines 10-18) through an objective lens (101), and detects a light from the sample (column 6, lines 38-43), said laser microscope comprising: a spectral resolution section (35), which comprises a prism (37), configured to spectrally resolve said laser light into the lines of different emission wavelengths (column 5, lines 28-32); a light receiving element array (41), which is a split photodiode, configured to simultaneously receive the lines of different emission

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wavelengths such that each emission wavelength of said spectrally-resolved laser light is respectively received by one of said light receiving elements (figs. 3 and 4); a controller (43/53 in fig. 3, 63 in fig. 4) configured to receive an output signal of the light receiving element array and controlling said light intensities of the lines of different emission wavelengths (column 5, lines 41-44); an optical fiber (27 or 57) for guiding said laser light into a laser microscope main body wherein said spectral resolution section (35) and said light receiving element array (41) are disposed on a light emission side of said optical fiber (fig. 3); an acousto-optical element (69, fig. 4), disposed on an optical path of said laser light, configured to receive said control signal output from said control unit and set the respective light intensities of the lines of different emission wavelengths of said laser light; and a beam splitter (31, figs 3 and 4) configured to split a part of said laser light and guiding the part into said spectral resolution section. Birk et al. discloses the claimed invention except for explicitly stating that the controller simultaneously controls respective light intensities of the lines of different emission wavelengths of said laser light to be constant and that fluorescent light is being detected from the sample.

Schoeppe et al. teaches a laser microscope (fig. 1), which irradiates a sample (5) with a laser light (13.2) including lines of different emission wavelengths (column 3, lines 15-22) through an objective lens (4), and detecting a fluorescent light from the sample (column 3, lines 49-57), said laser microscope comprising: a spectral resolution section (21) configured to spectrally resolve said laser light; a light receiving element array configured to receive the laser lights spectrally resolved by the spectral resolution section (41); a controller (36, 34) configured to receive an output signal of the monitor diode and controlling said intensities of the lines of different emission wavelengths to be constant (column 4, lines 1-19). It would have been obvious

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to one of ordinary skill in the art at the time the invention was made to have the controller of Birk et al. adjust the intensities of the lines of different emission wavelengths to be constant as suggested by Schoeppe et al. to prevent drift and reduce intensity fluctuations in the image (column 4, line 28, Schoeppe). Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the microscope detect fluorescent light being emitted from the sample as suggested by Schoeppe to study specific characteristics of a biological sample.

4. Claims 10, 11, 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birk et al. in view of Schoeppe et al., as applied to claims 12 and 21 above, and further in view of Eastman et al., U.S. Patent No. 5,684,582.

Birk et al. in view of Schoeppe et al., as applied to claims 12 and 21 above further disclose a collimator lens (29, figs. 3 and 4, Birk) configured to collimate said laser light guided by the optical fiber. Birk et al. in view of Schoeppe et al., as applied to claims 12 and 21 above disclose the claimed invention except for a converging lens disposed between said spectral resolution section and said light receiving element array and configured to converge the lines of different emission wavelengths. Eastman et al. teaches spectral resolution unit (fig. 1) including a prism (column 4, lines 6-7) and a converging lens (66). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the converging lens of Eastman et al. to the system of Birk et al. in view of Schoeppe et al. to prevent stray light or to be able to image the light. Further, regarding claim 11, the illuminating device (1) of Birk et al. which includes the collimator lens, the beam splitter, the spectral resolution section, the light receiving

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element array, and the converging lens from Eastman et al. are formed into one block (figs. 3, 4 and 7), and the block is constituted to be attachable/detachable with respect to a main body of the laser microscope.

Response to Arguments

5. Applicant's arguments with respect to claims 10-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LAF

March 30, 2004


MARK A. ROBINSON
PRIMARY EXAMINER